BSAVA Congress Continuous Quality Improvement webinar series: How to become a quality improvement ambassador to improve clinical standards in your practice.

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Webinar transcript

Hello and welcome to this RCVS Knowledge webinar produced for BSAVA Congress 2020. The theme of this webinar this morning is how to become a quality improvement ambassador to improve clinical standards in your practice. My name is Lou Northway. I'm a Registered Veterinary Nurse based at Wendover Heights Veterinary Centre in Buckinghamshire, and I'm going to be sharing with you how I've implemented quality improvement into various different elements of my working day in clinical practice.

So I wanted to start my lecture today by sharing this quote which I found online, which I thought was absolutely wonderful. "Quality improvement is the combined and unceasing efforts of everyone to make changes that will lead to better patient outcomes, better system performance, and better care, better professional development". Now when we think of this quote in a bigger capacity, it is what veterinary medicine and nursing is. We are always striving to do better, learn more, and improve patient care. The thing about quality improvement, which it comes from a slightly different angle, is on how we work in practice ourselves, how we deal with situations and how we can use resources to assess how we're doing and make things even better.

So firstly, when you think of quality improvement, you might not actually know really what quality improvement is or what sort of tasks that would involve in practice. So on the screen now you'll see various different things that you can start doing in practice, the emphasis of my lecture today is going to be focused around clinical audits. But quality improvement is so much more than just doing auditing; performing team discussions, opening up the learning environment, looking at discussing evidence-based nursing and vet med papers together, providing standard operating procedures, checklists, guidelines and protocols for your team to help support them every day at work and also benchmarking. So it's very hard to know how you're doing unless you measure it and also compare yourself against other practices or perhaps another branch.

So when I first started looking at QI, one of the first things I thought to myself was, how is my team doing? How are we doing as a practice? Because I honestly thought we were doing really, really awesome, and it wasn't until we started measuring how we were doing, so implementation of audits, did we see actually that things were good, but they weren't fantastic in all areas and there was definitely

room to be done, to be improved. And I think when you start doing all this in your practice too, you will soon realize that actually there's always room for improvement even if you're doing really, really well. But it's definitely an eye opener for me, after the first few months of doing clinical audits, I presented the evidence to my team to show them how we were doing and it was, I think they were quite surprised actually. So in particular when we were talking of our post-op neutering audits and things like that, and I'm going to cover that in more detail in a few slides time, but we can all assume we're doing a good job because we all hope we're doing a good job.

But unless we actually measure how we're doing, we can't truly know that. And the only way to know that is to do a clinical audit. Now you might be thinking, Oh, clinical auditing, it sounds like it's going to be really monotonous, really boring, really long winded, really complicated, and I just don't have the time or the mental capacity right now to take that on board. Well, I'm going to stop you right there because actually auditing is not that complicated. And RCVS Knowledge has produced some wonderful resources to help guide us through the process. So this is a section of one of their infographics on auditing. And you can see very quickly, number one, choose a topic. So you can think of an area in your practice that you'd like to have a closer look at. And I'm going to make some suggestions in a few slides time. Once we have looked at and we have chosen our topic, well, what specifically do you want to look at and improve – what is of interest to you? And then you want to be setting a target. So you want to be thinking about, so if we're doing this well right now, how much better do we want to make it? And you should make those goals realistic and we want to collect the data. Again, you don't have to do anything particularly fancy. If you're a wiz on Microsoft Excel, then by all means use that. But when I first started collecting data in practice, I literally put pen to paper and drew out some tables, which I stuck up in my prep room whereby the team would write down data for me, relating to, this with anaesthesia, actually at the time for this initial audit. And from that I then inputted it into Excel at a later date.

And then we're gonna look at it. That's the fun bit. So, you know, what were we doing well, what were we doing not so well. Then where do you go from here? So I then go and look at evidence-based nursing protocols or Vet med protocols, depending on what it is we're looking at, and then I present evidence to the team and we together come up with ideas and solutions for change and then we implement that change. Then it's a case of re-auditing and then reviewing again. So it's an ongoing cycle. It never ever finishes. But this is a two page document which you can download from RCVS Knowledge website. It's just a walkthrough, as I've just basically going over anyway. But it's very simple and straightforward and you don't have to do a really comprehensive in-depth looking at multiple things to start with. Just choose something nice and simple and I'll give you some suggestions in just a moment.

So what can you audit? So let's think of clinical topics to start with. So this is probably audits that will appeal to the vet or vet nurse team. So post-op temperature is probably the one I would recommend you start with as it's probably the easiest one to collate data. And also to look at and review sort of what you're doing. So how many of your patients are coming back from operations with suboptimal temperatures. So hypothermia is extremely common in our anaesthetised patients. So in a month, how many patients did actually come back to bed normothermic. When we first did this in my practice, we were finding that most dogs were coming back nice and toasty, but our feline patients were actually suffering with hypothermia more. So we adapted, updated our protocols in order to improve our results. And it did make a massive difference and it has ongoing, and you can make it into a fun thing as well. So

for example, you know the nurse that brings back the patients with the most normal temperatures a week gets a prize or something like that. There were loads of fun ways of improving standards.

Drug dosing errors, and reporting of those drug dosing area errors. So my practice, we implemented what we called a 'whoopsie book'. So this is an informal book whereby nurses can write down, or vets or support staff when they've encountered a drug dosing error. So it's been noted on the clinical notes when the drugs have been dispensed, written on a hospital sheet X, Y, and Z. And then we look at the factors surrounding that. Pre-medication protocol. So are they actually optimal for what you're doing? So how many patients are requiring a rescue analgesia intra-op in response to noxious stimuli, things like that you can look at an audit. You can look at adverse events during anaesthesia. So how many patients were suffering with low blood pressure during procedures? And again, if anyone's interested, I have written, there's a case study on an anaesthesia audit I did, which covers actually quite a lot of these first few points and that was a real eye opener and very interesting.

Post-op wound complications is one, we're going to cover it in quite a lot of detail during this webinar, because, this was the audit which I won an award for this year and it's something that I've been doing now for the last three and a half years in practice, and it has been a real eye opener as I'm sure you'll agree, as we go through. Postoperative gastrointestinal upset. So thinking about how many of your patients, I find this is typically our canine patients, come back with vomiting or diarrhoea post-op. And then we can look at other things as well. So IV catheter site infections and phlebitis, how many patients a week you're seeing in kennels with generalized diarrhoea and vomiting. Is it seasonal, things like that. If you can all do that ongoing and then it'll sort of guide you as to, sort of, changes in your biosecurity at certain times of the year. And also kennel cough cases again 'cos they come in flurries.

If you have non-clinical members of your team, so perhaps your client care team, then you can ask them to audit different areas of your practice as well. So the frequency of cleaning tasks that are undertaken, so we may have lovely, beautiful protocols written up and checklists and tick sheets and things like that, but is it actually being done? If not, why not? And that's the time then to think as a team, is it because of time? Is it because of a lack of people, and things like that? Missed appointments. Again, how many wasted appointments are you having in a week or a month? This is something we look at occasionally at my practice and sometimes it can be, you know, a significant amount of wasted hours. And therefore, we have to think of the reasons why there, so can we be sending out reminders, communicating with our clients in different ways. And looking at client feedback is quite interesting as well. You can audit that. So the nature of the feedback, so is it financial, is it emotional? and things like that. And then having discussions with your team and making changes as appropriate.

And then this one is a very common one in my practice. Frequency of prescriptions not sent to the correct branch. So I'm sure many of you have branch surgeries. We process all of our repeat prescriptions at our main centre and then they get sent to our branch surgery. But sometimes even though we have many systems in place it doesn't always happen. So we have to be looking at the reasons why that may be happening. Productivity as well. So is it actually realistic how many operations are booked in each day? Is it meaning that your team are then having to work late and things like that. So you can look at the average amount of procedures that are being done is it actually working for your team and things like that. So once you start looking at different topic areas to audit, the opportunities

are endless and it can be quite difficult then, I find, to limit yourself and how much you're looking at week to week.

So who is best to take lead in practice? Well, personally, I think one person is best to become the quality improvement ambassador. So that's the person that with the main interest in making improvements. Now it's quite a large job depending on how much you want to look at. So what I would recommend is that the QI ambassador then looks out in their team at who has what interests. So if you had a team member with an interest in anaesthesia, then it may be sensible to get them to audit and look at sort of your anaesthesia protocols in practice. If you have a nurse that's really interested in wound management, then it would be a really good idea to get them involved in setting up and monitoring and auditing the patients coming back for their post-op checks, looking at their wounds specifically and things like that. Because I do believe if you have a passion, it really does push perseverance and also productivity. So with your audits it can be quite a lot of work to keep it up, especially alongside your normal in-practice clinical role. But if you're interested in what you're looking at and reviewing, then by all means, I think you'll do much, much better.

So I'm going to share with you now some of the results from the audits at my practice. And it's specifically we're going to be looking at post-op complications in all patients and procedures and post-op temperatures. I did plan on having more data for this year than what is in this slideshow, but due to COVID-19 and furlough, I am lacking a few months so we're going to do some retrospective discussions here as well, looking at the last three years. So, bitch spay audits. So when we have patients coming in for neutering, when they come back for their post-op check we always obviously make a record of whether there are any abnormalities or not. And back in 2017, I started using the RCVS Knowledge, vetAUDIT spreadsheet, which you can download from the website for free. And this is a very simple, straightforward spreadsheet that you can use and it helps you just basically record the incidences of complications. And then every couple of months you upload your data along with hundreds of other practices in the UK that are also submitting their anonymised data and you can see how your practice fits alongside others. So when I first started doing this, the first sort of couple of months, for our bitch spays at least, things were looking pretty good. I was like, excellent. We're below the national average. That's great. So our complication rate is low. Fantastic. However, you'll see April to October, 2018 we had a lot more complications in our bitch spays and I'm going to talk you through some of the reasons why we thought since this may happen. And then again, it reduces and reduces and then into the end of last year, our complication rate was much below the average, which is fantastic due to many changes that we've made as a result.

Looking at our dog castrates. This was sort of the eye opener for us when we started doing audits. So we, in fact, we found that our dog castrates were having a higher incidence of complications compared to the national average. So why was this? And as the years and the months have gone by, again, we have made improvements. But there are things out of your control which you simply will not be able to change. But from a clinical perspective in practice and even from a communication perspective we can make a big difference. So what complications were we seeing? So in our canine neutering patients, minor complications, so just erythema, some swelling, occasionally seromas. We have a large proportion of young, very bouncy dogs in the practice, so that was often encountered. Patients with clipper rash. However, there were more serious complications encountered, such as wound infections, suture reactions, patients interfering with their wounds and sometimes removing their sutures, complete

wound breakdown, diarrhoea or vomiting, prolonged lethargy, inadequate analgesia. So these are all comments made on the clinical notes.

So we're going to go onto cats and then we're going to work through the changes and the discussions we had around the complications that we saw. So with our cat spays, nicely below the national average on the complication rate front, which is great. But one thing we have noticed with our cats is we did have more cats not coming back for their post-op checks, comparative to dogs. So whilst no news is good news, we can't say a hundred percent that there were no complications encountered. With our feline patients, most often there some erythema. If cats had skin sutures placed sometimes they remove them. We did have some cats with seromas, suture reactions, diarrhoea or vomiting, although it was far less frequently than in dogs, inadequate analgesia and lethargy. So what did we do to start with? We reviewed wounds. So we were looking at the pre-op advice we're giving to owners. We were finding that some dogs were coming in from their, sort of morning walk in the woods, covered in mud ahead of their operation. So not really ideal when you want a nice sterile surgical field. So just advising owners, please keep them clean and dry on the morning of their operation and ideally give them a bath the week before if they are a dog that likes to go on many adventures in the woods. Considering patients which would be at high risk of wound infections as well. So patients that perhaps had hyperthyroidism or other immune-mediated conditions. So just taking extra care with those patients. And the clipper type that was used. So in our canine patients we were finding a lot, that we had a lot of scrotal erythema and clipper rash. So we changed the clipper type we were using in practice to much smaller fine toothed clippers, not to cause irritation. Because what we were finding when patients were having clipper rash, they are wanting to rub their itchy scrotums on the floor or really trying to lick and, sometimes were managing to lick and therefore that's why we were having a higher incidence of complications in these patients.

We also looked at our skin scrub technique. Now all of us in practice when we started discussing this, were doing slightly different things. And it's not to say that anyone in particular was wrong, but it was all what we've been taught over the years at various points. So what we did is we arranged for a surgical skin prep CPD lunch and learn, where they presented evidence-based veterinary nursing. And we adapted our skin preparation techniques as a result. So that possibly did play a factor in the improvements that we saw. The overall aseptic approach to sort of preparing the skin, so making sure you're wearing gloves at all stages of skin preparation and also wound coverings at the end of surgery. So making sure that the wounds were covered for at least 24 hours post-surgery to allow the skin edges to knit together.

And then when we think of our pet owners, post-op wound protection options, giving them options is always a good idea. But one of the key changes we made with our canine patients was to swap over from routinely using the traditional plastic Buster collars to pet clothing or pet shirts, which would cover up their surgical sites. And we were finding that compliance with pet owners, is much better using the pet clothing option compared to the large rigid Buster collars. ‘Cos that's, as I'm sure you can appreciate, a large bouncy Labrador with a Buster collar on is not easy. So that did make a massive difference. When we look to gastrointestinal disturbances, as I said before, this was more commonly seen in our canine patients than our feline patients. But we reviewed our starvation times. So traditionally we would be advising 12 hour or more fasting, and now we allow our pet owners to give them a small bedtime snack as well. So there isn't such a large fast between their last meal and their operation.

Stress as well. So how can we reduce the stress to patients, did we have any that we knew were particularly anxious about coming to the practice? Allowing them to have a later admission or making sure they'd be done first and not have to wait in their kennel all morning. Because we get a strong fight or flight reflex with the stressy patients and it can cause colitis. So just trying to sort of be sensible with them there. And we reviewed the drugs used intra and post-op, so specifically non-steroidal. So the timings of when we gave them, just in case there was any perioperative hypotension which was affecting GI mucosal blood flow, we wanted to make sure that everything could be nice. So now they have the nonsteroidals inter-op if their blood pressure is lovely or in recovery rather than standard at the beginning. We did have a discussion about pre-emptive analgesia and we agreed whilst it was in the animal's best interest to have it before the onset of noxious stimuli and inflammation, we were going to be implementing the use of different types of analgesic approaches, so local anaesthesia for example, so we were still addressing analgesia so it wasn't a problem. And we have considered probiotics. This at the start of this year, this was something we were going to try and see if it made a difference. But we didn't have the chance to implement that as COVID-19 blew up.

And then obviously in veterinary practice, the chance of an infectious component is always there. So if you have flurries of patients coming back two, three days post-op with gastroenteritis or haemorrhagic gastroenteritis, it's worth doing an infection control screen and just swabbing your practice and seeing if you're growing any nasties anywhere. We have done this before and it's definitely something that we should be doing at least sort of twice a year, I think anyway, to make sure that our cleaning techniques are efficacious. If you have a patient demographic which are raw fed, again thinking about whether we're going to be barrier nursing them because we really should be, and are we actually going to feed the patient raw meat in the hospital? Depends where you work. Some practices won't feed raw within the practice because of the risk to other patients and also to staff, but it's worth having the discussion with the owner.

But there are so many factors, I'm sure you can see already. You think, blimey Lou, you've gone over so much. But when you start auditing, you can start just thinking of like one of these things. Okay, well we're going to change one of these factors to see if it makes a difference. And then if it doesn't, let's look at something else. And you keep going like that. And sometimes it's a combination of changes that makes all the difference. Okay. Sometimes it was commented on the post-op notes, the owner would have said, "yes they were absolutely fine. They didn't move for three days when they got home". And of course, to a pet owner, the pet looks relaxed and settled, but actually if it's a cat for example, then pain could have been a problem. So we did look at the pre-medication protocols, the types of drugs that we were using, and also what we were sending patients home with on the duration, and we made some adaptations as a result. So it's always worth having a discussion with the owners - do you know what pain will look like in your pet if they're uncomfortable? Because the perception of pain in or what owners perceive their pets to look like is often very different to what we know they look like, so it might be an idea to give them guidance there, but yes, it's just one of those things that can be overlooked I think. You know, a nice quiet dog because they're really painful and don't want to move. Yes, it makes life easier for the owner, but it's not really fair on the patients. So this is something definitely to look at.

Once you've been looking at your post-op neutering patients for a few years, you might start thinking, Oh, actually I want to look at everybody. And this is something that I started doing this year in January. So from January onwards I started auditing every single patient no matter what they were coming in for,

GA or sedation wise, ASA scores one to five. So that's a healthy to our super sick. And also looking at other things like their wound scores and also making a much, sort of, more definitive memo of what the complication was. Now, the reasons why we brought in wound scoring was when you look at clinical notes in the computer, everybody's clinical notes are very different and there it does, sort of, you can perceive what they mean or interpret things very differently. So it was to standardise. So now the team will score patients zero to five depending on what type of situation is going on with the wound. And then, again, we're also going to be looking at post-op temperature record for all patients now as well. So this is just something ongoing. You don't have to look at this many different things, but this gives me so much scope and so much information and just really helps us review how we're doing in practice.

So as I say I am limited, I've only got two months' worth of data here because of COVID-19. But you can see here we were looking at post-op temperatures and the majority of our patients were 37 or above, which is great. That is what I advise the team would be a good, a good way to go. So that's where we were aiming, but we did still have patients that were 36 to 36.9, which isn't ideal. So what type of patients were they specifically on my spreadsheet, I can see what species were coming in colder and typically, yes, it's cats. We know cats really struggle under anaesthesia on the temperature front, so making much more of an effort with those guys. And sometimes you'll get results and they'll actually help you source more equipment for your practice. So for example, we now thankfully have two warmer heating systems, but prior to doing audits and seeing how many patients were hypothermic on recovery, we only had one. So we'd have to prioritize who was having what piece of equipment and that was the same for monitoring equipment actually as well. So having results of complications and issues actually does help you build evidence to prompt your employers to enable you to get more equipment, which can only be a good thing.

But as you can see for January and February, overall patient outcomes, we did have quite a few patients lost to follow and these are typically our feline patients. So again, it's looking at why aren't pet owners coming back? Is it because they think they have to pay? Is it because the stress of getting their cat in their cat basket again for their post-op check, things like that. Is it because the dog's completely back to normal so the owner doesn't perceive the need for the post-op chat? Things like that. But you can see the vast majority, no problems. And it's just really, really interesting to stop and have a think about why you're getting the results that you're getting. And including your team is really important. And I have just covered this already about the loss to follow, but that's another rule. It's quite simple. So out of in a month, how many patients don't come back that should be coming back. And that's quite a nice one to start with if you haven't done this before.

The Southampton wound scoring, as I say, this was what we implemented, actually the middle of last year because, as I say, it was very difficult for me sometimes to interpret or decide which category to put my patients in, so we made it more specific and this has worked really, really well. And this, in all consult rooms, there's just a little chart on the wall and they will know that they just have to score them zero to five, depending on what's going on. And then you have to look at the wounds in more detail. So those are broken down. Well what specifically were they. So the dental wounds that broke down were actually extraction sites. So after having big flaps done. And I can remember from recording this, the soft tissue surgeries that break down were big neoplastic mass removals, so typically poorer wound healing, big areas, things like that, but it is interesting sometimes just to look and see which wounds in particular are not healing particularly well. So is it the approach that we need to change, sutures, wound

management post-op, things like that. And I can see at the bottom here under species, all the different types of species that we see, so you can see we're quite a dog heavy practice. 80% of dogs really I would say are our patient demographic, followed by cats. And then we do have a fairly large exotic case load, although January and the half of February that's included in this audit was a bit on the quiet front there.

So our neutering post-op complications. So you jot in all your complications on the RCVS Knowledge vetAUDIT spreadsheet and then it gives you a breakdown and shows you what your complication rate is. So up until mid-February, our complication rate was 18.3%. And I think at that point the complication rate was around 22% national average across the board for dogs and cats, sorry for dogs at least. So yeah, it's quite nice to always have a flick at the end of the month and just say, Oh, where are we sitting? And you will find month to month, year to year things will fluctuate. I do find seasonal changes. So in the months where it gets warm or it gets very wet, we have more problems with wound infections. And again, I think it's to do with having, sort of, nicer environments for the bugs to grow. So you will find that there are changes.

The National Audit for Small Animal Neutering, this is what it looks like. If you scan the QR code using your smartphone, it will take you directly to the website, but it's super, super straightforward to use and download. So this is what I would encourage you to do to start with. If you don't want to do temperatures or lost to follow-up appointments, start doing the small animal neutering audit. It will really, really open your eyes, and it is really interesting. So, for example, as a veterinary nurse myself, I could be consulting one day and I see maybe one complication, but over the course of the week, my colleagues see a couple each day and then by the end of the week we can have, you know, 25 patients with wound infections. But because there's only been, you know, one of us on each day, you sometimes don't put all the problems together and actually realize that there is an issue going on. So it really does help with surveillance. I give myself half a day to a whole day every other week to record the data and then a whole day once a month to accumulate it all, look at the results comparative to the previous month, and then issue a report to the team, and so everybody gets to have a look at that.

And then there are also different types of auditing and surveillance systems from RCVS Knowledge vetAUDIT. So there's a canine cruciate registry where veterinary surgeons are encouraged to report the incidences of complications in canine patients that have had cruciate surgery. And also antimicrobial resistance audit. So there's various different ones that you can do, but those of you that are watching this for the first time and you're not sure where to start, I would definitely start with the National Audit for Small Animal Neutering.

So how do I make changes based on the results of my audit? So you've got your figures, things could be looking really good, things could be looking less good, but what are you going to do about it? So go back to the evidence base to start with. So the best bit of information I can give you really is to think about, so make a spider diagram so you put your problem in the middle, or your result, and then spider diagram off that all of the things that you think influence the result that you're getting. And then from that go to evidence-based veterinary nursing places like the RCVS Knowledge library, and look at the evidence to back up, just to have a look and see if what you're doing in practice at the moment is in line with the most up-to-date evidence. Does it still make sense to be done that way? So like I said, right at the beginning in regards to skin preparation, there's loads of different opinions there as to which is the right correct technique. Well go and look at the evidence and see what it says and that's where you can

start making small changes. But there's lots of free resources available for veterinary nurses online via the RCVS Knowledge website. And I recommend you all go and have a look at those. But go back to the evidence base and then take that evidence that you get forward to your team because sharing the audit results, often people are really interested in that. I find they want to know what we're doing well, what's not going so well, if there's been anything significant happen, and things like that. Present the evidence with that. And then also your personal recommendations for change. So what you think might work to help improve things. And also ask them what do they think? Because remember your team will be very experienced around you. Everyone will have different opinions and if you collaborate your ideas alongside evidence, you're much more likely to create a really positive outcome. But getting everyone on board is the main thing. I think everyone fears it's pointless because no one likes change. But if you present evidence of why change needs to happen, often people will walk forwards with you.

So stopping blame culture in practice. So blame culture is when we point the finger at each other, why didn't you do this? You should've done that and things like that. You may be thinking well Lou, why are you talking about blame culture now, we've just spoken about clinical audits. Well what I am going to be talking about next is significant event audits. So these are audits that are performed after something significant happens. It doesn't have to be something significantly bad. It could be something significantly awesome. But typically they are very helpful in times when things go wrong. Many of us, well, none of us go to work wanting to make a mistake. So it's important to remember that when something does happen, that individual that's involved did not want that to happen. So what type of problems do we see in practice? Quite commonly drug over or under dose, the wrong drugs being administered or the wrong fluid, wrong drug given to wrong patient, air in giving sets, closed adjustable pressure limiting valve on your anaesthetic breathing system, which has caused pulmonary barotrauma in your patient, maybe you've had an oxygen supply failure. And then what we all really, really struggle with is patient deaths. So when they're expected and, more often more difficult to deal with, when they're unexpected. So significant event audits, look at the system factors, the human factors, the patient factors, owner factors, communication factors and other factors. Some of the things we do in practice don't cover all of these different factors, but it is always important to consider them. And you can see on the right of the screen, that RCVS Knowledge have created a really simple walk-through to help us manage this. But doing significant event audits in practice is a game changer because it changes the culture. Because it's not what that one person didn't do, it's looking at all of the different factors that led on to the event happening because often the person that makes the mistake is just right at the end of a long chain of events. So it's taking a few steps back and looking at the big picture.

So we're gonna look at a few examples now of when things have gone wrong and when, and sort of like how we can use an SEA to make things well, move forward basically in a positive light. So example one, Rachel the student was setting up her breathing system ahead of a rabbit spay. The vet was in a rush and asked her to be really quick. Sally, the registered veterinary nurse had phoned in sick that day, so Rachel was actually left on her own. So they cracked on, 30 seconds after anaesthetic induction. Rachel, noticed the rabbit wasn't breathing and on closer inspection, the vet noticed that the valve was shut on the breathing system, and actually the patient went into respiratory arrest due to valve occlusion, followed by cardiac arrest and the patient died. Now straightaway it would be very easy here to blame Rachel for not leak testing her system. It could be very easy to blame the vet for not giving Rachel time to set up properly. And there's loads of finger pointing that can be done here. But the way we use significant event audit is to stop the finger pointing because there are so many influencing factors here, which led to this incident. So the system factors on that day was that Rachel didn't have suitable

support. So what could you change in your practice to help Rachel manage that situation if she's ever in it again? So maybe there could be an SOP or a guideline or a safety checklist for her to follow and run through and make sure she's fully ready for the next anaesthetic. That could be something perhaps when Sally the RVN comes back into practice, she could do with Rachel, and also make sure she's really happy and competent to be left on her own in situations like that. the human factors could be that Rachel was worried about speaking up and that the vet was in a rush and she didn't want her to think that she was being really slow, so she just cracked on and did her best. The patient factors here as well. Perhaps Rachel hadn't actually anaesthetised a rabbit before with the veterinary surgeon and maybe she was unfamiliar with the anaesthetic equipment. Again, this is something that comes back to training. So making sure that there are systems in place to make sure everyone is on board with the equipment that's available. Have they actually been shown? And things like that.

Owner factors probably isn't an issue here because the incident was not non-client specific. Communication factors I think was a massive one here. So afterwards, probably Rachel, Sally and the vet should all sit down together and have a chat about it and come up with ways which they could stop this happening again in the future. So as I already mentioned a moment ago, drawing up a guideline and some checklists to help guide people through the setting up process and the importance of undertaking all the separate tasks that need to be done. And then finally, are there any other factors that influenced this incident? Well, on this occasion it was a lack of time really overall. Perhaps the vet also was worried about anaesthetising a rabbit, maybe they're normally a dog vet, and there was some anxiety there. So perhaps the vet didn't have sort of as much patience as normal. So, as I say, no one is to blame in any way, shape or form, but it's just thinking of ways which you can create documents, guidelines, checklists, to have a physical resource to help each other. Or a team chat, you could have a chat before you start. So from now on they could say, all right, well every time we're going to anaesthetise a rabbit in the future, we're going to talk through the processes, what we're going to do with the breathing system if they stop breathing, and things like that.

Next example. Jessica is a member of the client care team. It's her first evening working on the front desk alone and unsurprisingly, it's very busy. The nurses just discharged Toffee the bitch spay back to her owners. But whilst at the desk, the owner states they don't actually want the Buster collar like the nurse suggested because Toffee won't like it. Jessica takes back the Buster collar and continue serving another customer. The owner does not have any written post-op advice. The following morning Toffees owners phone in as she removed her sutures overnight. So nightmare situation here, isn't it? And I think probably some of you have sat there and thought, we've had something similar like this happened before as well. So I put this in because I had seen this happen many years ago when I was a student nurse, and an owner phoned in the morning, to say, 'my bitch has chewed out her stitches and her intestines are hanging out' and when the dog presented, yep, they were, they were hanging out. So that was a big serious situation. That's about 12 years ago now. So a long time. But yeah. Okay. So what were the system factors here? So firstly the nurse discharged Toffee back to the owner, that's all fine. She'd done it separately out the way, but unfortunately, Jessica, the client care member of the team, she was busy serving a client and even if the nurse discharged Toffee in front of her, she probably wouldn't have heard the important information that the owner had been given. Equally, perhaps Jessica who is a member of the client care team hasn't had any training on the importance of post-op care. We often assume that we know each other's job roles and we know who does what and who says what and what those important bits of information are. But we need to be checking that.

The human factors here, Jessica was really busy serving a client, so of course she would happily just take the buster collar back off the other client, not really thinking about the big picture of the implications. It's not her fault there, but equally the nurse didn't give the owners any written post-op information. So when we talk to pet owners, they take in a very small amount of what we say to them. So giving a pet owner written information, reiterating the really key points is essential. And again, you could recirculate these key bits of information around your client care team to make sure they're on board. Now the patient factors. Now we know that most dogs don't really appreciate having Buster collars. They don't. But they are important when it comes to wound infection and preventing wound infections, and as Toffee did, removing her sutures. So at this point when Jessica took back the Buster collar, perhaps if she'd been made aware she could have provided the owner with a pet shirt, but again, she was working on her own. So perhaps the nurse should have checked with the owner. Are you happy with the Buster collar or would you like a pet shirt? And again, it's not pointing the finger at the nurse, but it's just looking at all the factors. Are we offering our owners enough different post-op wound protection methods or do we need to have another think about this? So it's thinking out of the box. The owner didn't, probably didn't really understand the importance of the Buster collar and was just hoping that she'll leave her wound alone and I'll make sure she doesn't lick. But actually we know that as soon as the owners go to bed, that's when they have a jolly good lick. But communication factors all around, were here really, between the nurse and the owner, owner and the front desk member of the team. We could say, you know, we need to look at this and change how we approach things here. It’s not a good situation, but we can learn from this. And that's the whole point, what these significant event audits are about. It's about problem shooting and looking at how you can change your systems of work to prevent or reduce these problems happening again in the future. And that's what it's all about. None of us want to make mistakes, but when they do happen, use it as a learning exercise to implement change. So in summary, what I would do is encourage all of your members of your team to be reflective. So every day, think to yourself, how are we doing and how could we do things better? Think about members of your team with niche interests. What can my team members audit that is specific to their particular interest? But keep it simple when you start, if you overwhelm yourself, you'll get very stressed and you'll probably lose interest. So just choose one topic to start with and then build as you gather more confidence.

Guidelines and checklists help support teams and improve patient safety. And there's much evidence to support that. And I would recommend that when you have junior members of your team working, that guidelines really make all the difference. They're giving them something to reference from. This is what we're doing and this is why we're doing it. Checklists are not designed to be patronising or condescending or to point out what you don't know. They are there to support us when we're having a busy day and we can easily forget an essential bit of an equipment or perhaps a step in the setting up process. So please embrace them. Please use them because they are there to help you. And remember that veterinary medicine and nursing is constantly evolving. So keep going back to the evidence base and update what you're doing in practice. Every year there will be new published guidelines and evidence papers released. So make sure you're reading them. You know why are things changing? Because that's the published evidence and we should be learning from it.

So with thanks to RCVS Knowledge, for their wonderful resources. And if you scan the QR code now, again using your phone, you'll be able to be taken directly to their website, whereby you can download all of their free wonderful resources, which are great, and will get you started. But thank you very much for listening to my webinar. I hope you enjoyed it. And if anyone has any questions, feel free to get in touch with me via one of the following ways.